SEQUENCE LISTING

<110> Gestion Univalor
BRISSON, Normand
DESVEAUX, Darrell
SUBRAMANIAM, Raiagopal
SYGUSCH, Jurgen

<120> PLANT TRANSCRIPTIONAL ACTIVATOR AND USES THEREOF

<130> 10662-121PCT

<150> US 60/479,871
<151> 2003-06-20

<160> 4

<170> FastSEQ for Windows Version 4.0

<210> 1
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<220>
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<400> 1

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Asn Leu Gln Asn Pro Thr Lys Thr Ser Tyr Leu Ser Phe Ser Ser Ser
            20                  25                  30
Ile Asn Thr Ile Phe Ala Pro Leu Ser Ser Asn Thr Thr Lys Ser Phe
        35                  40                  45
Ser Gly Leu Thr His Lys Ala Ala Leu Pro Arg Asn Leu Ser Leu Thr
    50                  55                  60
Cys Arg His Ser Asp Tyr Phe Glu Pro Gln Gln Gln Gln Gln Gln Gln
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65 70 75 80
Gln Gln Gln Pro Gln Gly Ala Ser Thr Pro Lys Val Phe Val Gly Tyr
85 90 95
Ser Ile Tyr Lys Gly Lys Ala Ala Leu Thr Val Glu Pro Arg Ser Pro
100 105 110
Glu Phe Ser Pro Leu Asp Ser Gly Ala Phe Lys Leu Ser Arg Glu Gly
115 120 125
Met Val Met Leu Gln Phe Ala Pro Ala Ala Gly Val Arg Gln Tyr Asp
130 135 140
Trp Ser Arg Lys Gln Val Phe Ser Leu Ser Val Thr Glu Ile Gly Ser
145 150 155 160
Ile Ile Ser Leu Gly Ala Lys Asp Ser Cys Glu Phe Phe His Asp Pro
165 170 175
Asn Lys Gly Arg Ser Asp Glu Gly Arg Val Arg Lys Val Leu Lys Val
180 185 190
Glu Pro Leu Pro Asp Gly Ser Gly His Phe Phe Asn Leu Ser Val Gln
195 200 205
Asn Lys Leu Ile Asn Leu Asp Glu Asn Ile Tyr Ile Pro Val Thr Lys
210 215 220
Ala Glu Phe Ala Val Leu Val Ser Ala Phe Asn Phe Val Met Pro Tyr
225 230 235 240
Leu Leu Gly Trp His Thr Ala Val Asn Ser Phe Lys Pro Glu Asp Ala
245 250 255
Ser Arg Ser Asn Asn Ala Asn Pro Arg Ser Gly Ala Glu Leu Glu Trp
260 265 270
Asn Arg

<210> 2
<211> 263
<212> PRT
<213> Artificial Sequence

<220>
<223> Arabidopsis Whirly proteins AtWhy1

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Met Ser Gln Leu Leu Ser Thr Pro Leu Met Ala Val Asn Ser Asn Pro

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 1               5                  10                  15
Arg Phe Leu Ser Ser Ser Ser Val Leu Val Thr Gly Gly Phe Ala Val
            20                  25                  30
Lys Arg His Gly Phe Ala Leu Lys Pro Thr Thr Lys Thr Val Lys Leu
        35                  40                  45
Phe Ser Val Lys Ser Arg Gln Thr Asp Tyr Phe Glu Lys Gln Arg Phe
    50                  55                  60
Gly Asp Ser Ser Ser Ser Pro Ser Pro Ala Glu Gly Leu Pro Ala Arg
65                  70                  75                  80
Phe Tyr Val Gly His Ser Ile Tyr Lys Gly Lys Ala Ala Leu Thr Val
                85                  90                  95
Asp Pro Arg Ala Pro Glu Phe Val Ala Leu Asp Ser Gly Ala Phe Lys
            100                 105                 110
Leu Ser Lys Asp Gly Phe Leu Leu Leu Gln Phe Ala Pro Ser Ala Gly
        115                 120                 125
Val Arg Gln Tyr Asp Trp Ser Lys Lys Gln Val Phe Ser Leu Ser Val
    130                 135                 140
Thr Glu Ile Gly Thr Leu Val Ser Leu Gly Pro Arg Glu Ser Cys Glu
145                 150                 155                 160
Phe Phe His Asp Pro Phe Lys Gly Lys Ser Asp Glu Gly Lys Val Arg
                165                 170                 175
Lys Val Leu Lys Val Glu Pro Leu Pro Asp Gly Ser Gly His Phe Phe
            180                 185                 190
Asn Leu Ser Val Gln Asn Lys Leu Val Asn Val Asp Glu Ser Ile Tyr
        195                 200                 205
Ile Pro Ile Thr Arg Ala Glu Phe Ala Val Leu Ile Ser Ala Phe Asn
    210                 215                 220
Phe Val Leu Pro Tyr Leu Ile Gly Trp His Ala Phe Ala Asn Ser Ile
225                 230                 235                 240
Lys Pro Glu Glu Thr Ser Arg Val Asn Asn Ala Ser Pro Asn Tyr Gly
                245                 250                 255
Gly Asp Tyr Glu Trp Asn Arg
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<210> 3
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<220>

<223> Arabidopsis Whirly proteins AtWhy2

<400> 3

Met Lys Gln Ala Arg Ser Leu Leu Ser Arg Ser Leu Cys Asp Gln Ser
1 5 10 15
Lys Ser Leu Phe Glu Ala Ser Thr Leu Arg Gly Phe Ala Ser Trp Ser
20 25 30
Asn Ser Ser Thr Pro Gly Arg Gly Phe Pro Gly Lys Asp Ala Ala Lys
35 40 45
Pro Ser Gly Arg Leu Phe Ala Pro Tyr Ser Ile Phe Lys Gly Lys Ala
50 55 60
Ala Leu Ser Val Glu Pro Val Leu Pro Ser Phe Thr Glu Ile Asp Ser
65 70 75 80
Gly Asn Leu Arg Ile Asp Arg Arg Gly Ser Leu Met Met Thr Phe Met
85 90 95
Pro Ala Ile Gly Glu Arg Lys Tyr Asp Trp Glu Lys Lys Gln Lys Phe
100 105 110
Ala Leu Ser Pro Thr Glu Val Gly Ser Leu Ile Ser Met Gly Ser Lys
115 120 125
Asp Ser Ser Glu Phe Phe His Asp Pro Ser Met Lys Ser Ser Asn Ala
130 135 140
Gly Gln Val Arg Lys Ser Leu Ser Val Lys Pro His Ala Asp Gly Ser
145 150 155 160
Gly Tyr Phe Ile Ser Leu Ser Val Asn Asn Ser Ile Leu Lys Thr Asn
165 170 175
Asp Tyr Phe Val Val Pro Val Thr Lys Ala Glu Phe Ala Val Met Lys
180 185 190
Thr Ala Phe Ser Phe Ala Leu Pro His Ile Met Gly Trp Asn Arg Leu
195 200 205
Thr Gly His Val Asn Thr Glu Ala Leu Pro Ser Arg Asn Val Ser His
210 215 220
Leu Lys Thr Glu Pro Gln Leu Glu Leu Glu Trp Asp Lys
225 230 235

<210> 4

<211> 267

<212> PRT

<213> Artificial Sequence

<220>

<223> Arabidopsis Whirly proteins AtWhy3

<400> 4

Met Ser Gln Leu Leu Ser Ser Pro Pro Met Ala Val Phe Ser Lys Thr
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Phe Ile Asn His Lys Phe Ser Asp Ala Arg Phe Leu Ser Ser His Ser
20 25 30

Ile Leu Thr Ser Gly Gly Phe Ala Gly Lys Ile Ile Pro Leu Lys Pro
35 40 45

Thr Ala Arg Leu Lys Leu Thr Val Lys Ser Arg Gln Ser Asp Tyr Phe
50 55 60

Glu Lys Gln Arg Phe Gly Asp Ser Ser Ser Ser Gln Asn Ala Glu Val
65 70 75 80

Ser Ser Pro Arg Phe Tyr Val Gly His Ser Ile Tyr Lys Gly Lys Ala
85 90 95

Ala Leu Thr Ile Glu Pro Arg Ala Pro Glu Phe Val Ala Leu Glu Ser
100 105 110

Gly Ala Phe Lys Leu Thr Lys Glu Gly Phe Leu Leu Leu Gln Phe Ala
115 120 125

Pro Ala Ala Gly Val Arg Gln Tyr Asp Trp Ser Arg Lys Gln Val Phe
130 135 140

Ser Leu Ser Val Thr Glu Ile Gly Asn Leu Val Ser Leu Gly Pro Arg
145 150 155 160

Glu Ser Cys Glu Phe Phe His Asp Pro Phe Lys Gly Lys Gly Asp Glu
165 170 175

Gly Lys Val Arg Lys Val Leu Lys Val Glu Pro Leu Pro Asp Gly Ser
180 185 190

Gly Arg Phe Phe Asn Leu Ser Val Gln Asn Lys Leu Leu Asn Val Asp
195 200 205

Glu Ser Val Tyr Ile Pro Ile Thr Lys Ala Glu Phe Ala Val Leu Ile
210 215 220

Ser Ala Phe Asn Phe Val Leu Pro His Leu Ile Gly Trp Ser Ala Phe
225 230 235 240

Ala Asn Ser Ile Lys Pro Glu Asp Ser Asn Arg Leu Asn Asn Ala Ser

245 250 255

Pro Lys Tyr Gly Gly Asp Tyr Glu Trp Ser Arg

260 265